

Claims:

1. A dumbbell comprising:

an handle having an elongated central portion with opposite first and second ends,

a first flange formed on the first end and a second flange formed on the second end,

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a first weight attached to the first flange, said first weigh having a first recess, said first recess dimensioned and configured to receive the first flange, and

10 a second weight attached to the second flange, said second weight having a second recess,

said second recess dimensioned and configured to receive the second flange.

15 2. The dumbbell of claim 1 wherein each flange has a peripheral edge and wherein each flange is attached to its respective weight by a plurality of bolts positioned along the peripheral edge.

20 3. The dumbbell of claim 1 wherein each flange has an outward flat face and wherein each weight has an inner flat wall in the recess, the flat face of each flange abutting the flat wall of its respective weight.

4. The dumbbell of claim 1 wherein each flange has an external rim extending peripherally around the flange and wherein each weight has an internal rim extending peripherally

around the recess, the external rim of each flange abutting the internal rim of the flange's corresponding weight.

5. The dumbbell of claim 2 wherein each flange has an external rim extending peripherally around the flange and wherein each weight has an internal rim extending peripherally around the recess, the external rim of each flange abutting the internal rim of the flange's corresponding weight.
6. The dumbbell of claim 5 wherein each flange has an outward flat face and wherein each weight has an inner flat surface in the recess, the flat face of each flange abutting the flat surface of its respective weight.
7. The dumbbell of claim 6 wherein the central portion, flanges and weights each have a longitudinal axis and wherein they are all coaxially aligned.
- 15 8. The dumbbell of claim 7 wherein the external rim of the flanges and the inner rim of the weights extend parallel to the longitudinal axis of the flanges and the weights, respectively.
- 20 9. The dumbbell of claim 7 wherein the flat face of each flange and the flat surface of each weight is perpendicular to the longitudinal axis of the flanges and the weights, respectively.

10. A dumbbell comprising:

an handle having a substantially cylindrical central portion having a longitudinal axis and
5 opposite first and second ends,

opposite first and second flanges formed on the first and second ends of the handle,
respectively, said flanges each extending perpendicularly from the central portion, each
flange having a diameter, a thickness and a peripheral edge,

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opposite first and second weights attached to the first and second flanges, respectively,
each weight having a recess, each said recess having a diameter and a depth
corresponding to the diameter and the thickness of the respective flange, respectively, the
flange being retained in the recess,

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each flange being secured to its respective weight by a plurality of bolts positioned along
the flange adjacent the flange's peripheral edge.

20 11. The dumbbell of claim 10 wherein each flange has an outward flat face and wherein each
weight has an inner flat surface in the recess, the flat face of each flange abutting the flat
surface of its respective weight.

12. The dumbbell of claim 10 wherein each flange has an external rim extending peripherally around the flange and wherein each weight has an internal rim extending peripherally around the recess, the external rim of each flange abutting the internal rim of the flange's corresponding weight.

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13. The dumbbell of claim 11 wherein each flange has an external rim extending peripherally around the flange and wherein each weight has an internal rim extending peripherally around the recess, the external rim of each flange abutting the internal rim of the flange's corresponding weight.

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14. The dumbbell of claim 13 wherein the central portion, flanges and weights each have a longitudinal axis and wherein they are all coaxially aligned.

15. The dumbbell of claim 14 wherein the external rim of the flanges and the inner rim of the weights extend parallel to the longitudinal axis of the flanges and the weights, respectively.

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16. The dumbbell of claim 14 wherein the flat face of each flange and the flat surface of each weight is perpendicular to the longitudinal axis of the flanges and the weights, respectively.

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17. The dumbbell of claim 15 wherein the flat face of each flange and the flat surface of each weight is perpendicular to the longitudinal axis of the flanges and the weights, respectively.

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18. A dumbbell comprising:

a handle having an substantially cylindrical central portion having opposite first and second ends,

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opposite first and second flanges formed on the first and second ends of the handle, respectively, said flanges each extending perpendicularly from the central portion, each flange having a diameter, a thickness, an outwardly facing flat surface, a peripheral edge and a rim adjacent the peripheral edge,

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opposite first and second weights attached to the first and second flanges, respectively, each weight having a recess, each said recess having a diameter, a depth, an inner flat surface, and an internal rim extending peripherally around the inner flat surface, the diameter and depth of the recesses corresponding to the diameter and the thickness of the respective flange,

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each flange being retained in the recess of its corresponding weight with the outwardly

facing flat surface of each flange abutting the inner flat surface of the corresponding weight and the rim of the flange abutting the internal rim of the corresponding weight.

each flange being secured to its respective weight by a plurality of bolts positioned along
5 the flange adjacent the flange's peripheral edge.

19. The dumbbell of claim 18 wherein the internal rim of the weights and the rim of the
flanges are perpendicular to the inner flat surface of the weights and the outwardly facing
10 flat surface of the flanges, respectively.

20. The dumbbell of claim 19 wherein the flanges, weights and the central portion are all
coaxially aligned.

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